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EXAMINER

RUTKOWSKI, JEFFREY M

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2473

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/28/2010 has been entered.

2.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-11** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "wherein the linearly expandable router is expandable [ability to be expanded] by..." renders the claims indefinite because it is not clear if the additional routing engine is or is not required by the claim. The Examiner suggests changing the word "expandable" to "expanded".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 4, 7-8 and 10-11** are rejected under 35 U.S.C. 102(e) as being anticipated by Langhammer (US Pat 6,781,408).

7. For **claim 1**, Langhammer discloses *a first routing engine (input circuitry 135) having input and output sides; a second routing engine (input circuitry 135) having input and output sides; a third routing engine (input circuitry 135) having input and output sides* (figure 5c shows the input circuitry 135 has input and output sides. The input circuitry 135 is the same as a routing engine because the input circuitry has routing and selecting logic; see figure 5c); *wherein data flows in to the input sides of the first, second, and third routing engines and data flows out from the output sides of the first, second, and third routing engines* (figure 5c shows data flows into the top and left side of the input circuitry 135 and out the right and bottom sides of the input circuitry 135); *a first link, said first link coupling said input side of said first routing engine to said input side of said second routing engine; a second link, said second link coupling said input side of said first routing engine to said input side of said third routing engine; and a third link, said third link coupling said input side of said second routing engine to said input side of said third routing engine* (figure 6 shows there are links that contain programmable logic connectors **651a/b** that are used to interconnect the inputs of the input circuitry 135 via general interconnection resources **120**; see figures 5c and 6); *wherein the linearly expendable router is expandable by adding an additional routing engine (input circuitry 135) having an input and output sides and by linking the input side of the additional routing engine to the input sides of the first, second, and third routing engines* (this capability is anticipated by Langhammer because

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figures 5c and 6 shows that additional input circuitry **135** is added simply by placing it on the general interconnection resources **120**).

8. For **claims 4 and 11**, Langhammer discloses *providing a fourth router having input and output sides* (figure 5c shows there can be any number of function specific blocks **130**); *coupling, using a fourth discrete link* (links that have programmable logic connectors **651a/b**), *said input side of said first router to said input side of said fourth router; coupling, using a fifth discrete link, said input side of said second router to said input side of said fourth router; and coupling, using a sixth discrete link, said input side of said third router to said input side of said fourth router* (figure 6 shows there are discrete links made up of programmable logic connectors **651a/b** that interconnect the inputs).

9. For **claims 7 and 10**, Langhammer discloses *at least three broadcast router components* (function specific blocks **130**), *each of said at least three broadcast router components* (function specific blocks **130**) *is a discrete router* (figure 5c shows that the function specific blocks **130** are discrete components that have routing logic) *having an input side and an output side* (figure 5c shows there are input and output sides of each function specific block **130**) *and including a routing engine* (input circuitry **135**) *coupled between said input and output sides* (figure 5c shows the input circuitry **135** is internal to each function specific block **130**); *and means for coupling* (general interconnection resources **120**; see figures 5c and 6) *said at least three broadcast router components wherein said input side of each of said broadcast router component is connected, by a discrete link* (links that have programmable logic connectors **651a/b**), *to each and every one of the other said input sides of said broadcast router components* (figure 6 shows there are discrete links made up of programmable logic connectors **651a/b** that

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interconnect the inputs) *wherein data flows in to the input sides of the first, second, and third broadcast router components and data flows out from the output sides of the first second, and third broadcast router components* (figure 5c shows data flows into the top and left side of the input circuitry **135** and out the right and bottom sides of the input circuitry **135**); *and wherein the linearly expendable router is expandable by adding an additional broadcast router component having an input and output sides and by linking the input side of the additional broadcast router component to the input sides of the first, second, and third broadcast router components* (this capability is anticipated by Langhammer because figures 5c and 6 shows that additional input circuitry **135** is added simply by placing it on the general interconnection resources **120**).

10. For **claim 8**, Langhammer discloses *wherein said input side of each of said at least three broadcast router components has N inputs and said output side of each of said at least three broadcast router components has M outputs* (figures 5c and 6 shows that each function specific block **130** has N inputs and a different number of M outputs, namely 2N outputs).

Allowable Subject Matter

11. **Claims 2-3, 5-6 and 9** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: **claims 2-3, 5-6 and 9** require a particular switching arrangement. A prima facie case of obviousness cannot be established by combining Langhammer with the previously cited art that was used to reject **claims 2-3, 5-6 and 9** because modifying Langhammer with the cited prior art would require major modifications to Langhammer.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey M Rutkowski/
Examiner, Art Unit 2473

/KWANG B. YAO/
Supervisory Patent Examiner, Art Unit 2473